

Abstract

The corneal implant of the current invention takes the general form of a thin, transparent, flexible, porous, biocompatible film of suitable polymer material. The implant is sufficiently porous, the porosity being imparted by the film being irradiated to produce tracks and the material in those tracks being subsequently removed through an etching process, to allow the adequate flow of gaseous and tissue fluid components through the film. Specific embodiments of the invention are achieved by the addition of features to the general form. The embodiment applicable to corneal reshaping features a surface relief pattern in the implant. The artificial iris embodiment features an imprinted partly to fully opaque or partially reflective annular iris pattern of selected inner and outer diameters.